

Forest Trails and Landings

Job Sheet

JS-MO655

Missouri - Natural Resources Conservation Service

May 2005

Landowner:		Farm #:
Field(s):	Acres:	Tract #:
Soil Map Unit(s):		County:
Designed By:		Approved By:
		Signature:
Date:		Date:

DEFINITION: Forest Trails and Landings provide access to forest stands for management, removal and collection of forest products, recreation, and wildlife. These areas, whether planned or existing, include developed trails, skid roads, and log landing sites. Properly constructed or maintained Forest Trails and Landings minimize onsite and offsite damage to resources (including water quality) during periods of access.

PURPOSE: (check all that apply)

- Provide access to forest stands
- Minimize onsite and off-site damage to resources
- ☐ Enhance wildlife values

SPECIFICATIONS:

- When placing trails, keep grades as low as possible. Avoid long, steep grades that exceed 20%.
- Minimize the use of stream crossings and remove any temporary bridges and culverts when logging activities are completed.
- On trails with existing erosion problems, install water bars, rolling dips, and other drainage measures to route runoff away from the road. Stabilize diversion outlets with stone riprap or brush debris. Crowning the trails can help with drainage. See Table 1 for spacing guidelines.



A simple practice such as a conveyor-belt water bar can direct concentrated runoff flow away from a trail where it will not cause erosion.

- Adjust spacing of water bars to decrease the intervals between them on steep ground. Longer intervals are acceptable on relatively flat portions. Position water bars on about a 30 degree angle down slope.
- The installation of appropriate drainage structures, along with the addition of the autumn leaf fall, will often sufficiently protect roads from erosion if vehicular traffic is controlled. Where these measures are not sufficient, seed areas that are still susceptible to erosion.
- Completely close, rehabilitate, and re-vegetate problem areas.
- Locate landings areas on well drained ridge tops, areas close to an all-weather road, or sites close to the stand being harvested.
- Landings should have a slight slope to facilitate drainage. Do not located landings within 200 feet of streams, ponds, lakes, sinkholes, springs, caves, or wetlands.
- Clear log yard debris from landing areas and seed those areas down to a green browse food plot mixture.

Sur face downgro	Use material excavated from dip to construct hump
DEEP WATER BAR A = 24 to 30 inches B = 6 to 10 feet	B Rood Surface
SHALLOW WATER BA A = 8 to 12 inches B = 6 to 12 feet	Water bars are a common practice used to reduce erosion problems on forest trails.

MAINTENANCE: (check all that apply)

After rehabilitation, close trails susceptible to damage from vehicular traffic. C	construct gates or otherwise block the
trail with logs, trees, root-wads, etc. to prevent further use.	
Maintain vegetation on especially erosive areas.	
Prevent vehicular traffic when trails are wet and subject to damage	e if used.

- Rehabilitate water bars and turnouts if they fail to function due to excess sediment buildup or if scour develops at the outflow point.
- Maintain green browse planted on log landings and openings through adequate fertilization and replant as necessary.

SITE SPECIFIC PROVISIONS:

Trail Grade (%)	Water Bar Spacing (ft)	Total water bars
. ,		Log landings(n
		Log landing size(a
		Seeding area (trails and log landi (acres)
		Total culverts (number)

Total water bars	(number)
Log landings	(number)
Log landing size	(acres)
Seeding area (trails and log landings):(acres)	
Total culverts (inches)	(number) Size

Seeding - Species	Acres	Ibs PLS

ADDITIONAL COMMENTS AND RECOMMENDATIONS:

Table 1. Recommended spacing between water bars	
Trail Grade Distance between	
(%)	water bars (ft)
2	245
5	125
10	78
15	58
20	47
25	40
30	35